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In the claims:

Claims 1-66 (cancelled)

1~~-67.~~ amended) A method for diagnosis comprising:

    a) obtaining a sample from a subject;

    b) measuring a concentration of at least two kynurenine metabolites in said sample;

    c) comparing said concentrations of said at least two kynurenine metabolites to corresponding reference concentrations of said at least two kynurenine metabolites; and

    d) diagnosing a medical condition based on results of said comparing

wherein said medical condition is related to epilepsy.

~~2~~ **68**. (amended) The method of claim ~~1~~ **67**, wherein said at least two metabolites are selected from a group consisting of neuroprotective metabolites and neurotoxic metabolites.

~~3~~**-69**. (amended) The method of claim ~~2~~ **68**, wherein said group consists of TRP (tryptophan), KYN (kynurenine), 3HOKYN (3-hydroxykynurenine), AA (anthranilic acid), 3HOAA (3-hydroxyanthranilic acid), KA (kynurenic acid) and QUIN (quinolinic acid).

~~4~~**-70**. (amended) The method of claim ~~2~~ **68** wherein a first metabolite selected is a neuroprotective metabolite and a second metabolite selected is a neurotoxic metabolite.

~~5~~**-71**. (amended) The method of claim 4 **70** wherein said first metabolite is KA (kynurenic acid) and said second metabolite is 3HOAA (3-hydroxyanthranilic acid).

~~6~~**-72**. (amended) The method of claim 4 **70** wherein said first metabolite is AA (anthranilic acid) and said second metabolite is 3HOAA (3-hydroxyanthranilic acid).

~~7~~**-73**. (amended) The method of claim 4 **70** wherein said first metabolite is KA (kynurenic acid) and said second metabolite is QUIN (quinolinic acid).

9-75. (amended) The method of claim 8 74 **67** wherein said medical condition is epilepsy.

10 **76**. (amended) The method of claim 8 74 **67** wherein said medical condition is a predisposition to epilepsy.

11 **77**. (amended) The method of claim 10 **76** wherein said subject is substantially free of clinical manifestations indicative of epilepsy.

12 **78**. (amended) The method of claim 1 **67** wherein said corresponding reference concentrations are metabolite concentrations of an individual without said medical condition.

13 **79**. (amended) The method of claim 1 **67** wherein said corresponding reference concentrations are metabolite concentrations of an individual with said medical condition.

14 **80**. (amended) The method of claim 1 **67** wherein said corresponding reference concentrations are metabolite concentrations of an epileptic.

15 **81**. (amended) The method of claim 1 **67** wherein said comparing comprises
    i) determining a first ratio, being a ratio of two of said determined metabolite concentrations;
    ii) determining a second ratio, being a ratio of two of said corresponding reference concentrations; and
    iii) comparing said first ratio to said second ratio.

16 **82**. (amended) The method of claim 1 **67** wherein said comparing comprises
    i) defining a function, said function being dependent on metabolite concentrations;
    ii) determining a first value, said first value determined by a value of said function at said determined metabolite concentrations;
    iii) determining a second value, said second value determined by a value of said function at said corresponding reference concentrations; and

iv) comparing said first value to said second value.

~~17~~ **83**. (amended) The method of claim ~~16~~ **82** wherein said function is selected from the group comprising:

([KA][3HOKYN])/([KYN][3HOAA])

([KA] + [AA]) / [3HOAA] ;

[3HOAA] / [3HOKYN];

[KA] / ([3HOAA][TRP]); and

([KA] + [AA]) / ([3HOAA][TRP]).

~~19~~ **84**. (amended) The method of claim ~~1~~ **67**, further comprising:

e) determining an amount of an anti-epileptic drug in the subject; and

wherein said diagnosing of said medical condition is further based on said determined amount of said anti-epileptic drug.

~~20~~ **85**. (amended) The method of claim ~~19~~ **84** wherein said determining said amount of said ~~AED~~ **anti-epileptic drug** comprises measuring a concentration of said ~~AED~~ **anti-epileptic drug** in said sample.

~~21~~ **86**. (amended) The method of claim ~~19~~ **84** wherein said determining said amount of said ~~AED~~ **anti-epileptic drug** comprises noting a dosage of said ~~AED~~ **anti-epileptic drug** given to said subject.

~~22~~ **87**. (amended) The method of claim ~~19~~ **84** wherein said medical condition is an individual reaction to an anti-epileptic drug.

~~23~~ **88**. (amended) The method of claim ~~22~~ **87**, further comprising:

(f) adjusting a treatment regimen of said subject based on said diagnosing of said medical condition.

~~24~~ **89**. (amended) A system for diagnosis comprising:

a) a sample taken from a subject; and

b) a device configured to:

i) measure a concentration of at least two kynurenine metabolites in said sample; and

ii) compare said concentrations of said at least two kynurenine metabolites to corresponding reference concentrations of said at least two kynurenine metabolites.

~~25~~ **90**. (amended) The system of claim ~~24~~ **89** wherein at least one of said at least two kynurenine metabolites is a neurotoxic metabolite and at least one of said at least two kynurenine metabolites is a neuroprotective metabolite.

~~26~~ **91**. (amended) The system of claim ~~24~~ **89** wherein said device is configured to compare said concentrations by:

  ~~a.~~*ii.1*. determining a first ratio, being a ratio of said measured metabolite concentrations;

  ~~b.~~*ii.2*. determining a second ratio, being a ratio of said corresponding reference concentrations; and

  ~~c.~~*ii.3*. comparing said first ratio to said second ratio.

~~27~~ **92**. (amended) The system of claim ~~24~~ **89** wherein said device is further configured to:

iii) display a possible diagnosis of a medical condition based on results of said comparing.

~~28~~ **93**. (amended) The ~~method~~ **system** of claim ~~27~~ **92** wherein said medical condition is related to epilepsy.